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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/670,610

09/25/2003

Nathan P. Miscrocchi

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EXAMINER

NGUYEN, HAU H

ART UNIT

PAPER NUMBER

2628

MAIL DATE

DELIVERY MODE

05/31/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/670,610	MISEROCCHI, NATHAN P.	
	Examiner	Art Unit	
	Hau H. Nguyen	2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 and 26-32 is/are rejected.
- 7) ☒ Claim(s) 25 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The response filed on 3/12/2007 has been fully considered in preparing for this Office Action.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 21 recites the limitation "the second identification number". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-11, 17-24, 26-32 are rejected under 35 U.S.C. 102(e) as being anticipated by Haller et al. (U.S. Patent No. 7,079,990).

Referring to claim 1, Haller et al. teach a system for managing graphical information (Fig. 1), the system comprising:

a processing device (102, Fig. 1); and

a first memory portion (802 and 808 in the part library or database, Fig. 8) within at least one memory device (memory 110, col. 5, line 65-col. 6, line 17) that is coupled to the processing device, wherein the first memory portion stores

a first plurality of files having a first type of information (802, Fig. 8) relating to graphical entities (such as graphics library), and

a second plurality of files having a second type of information (808, Fig. 8) relating to graphical entities, wherein each of the second plurality of files references at least one of the first plurality of files (col. 10, lines 23-42); and

a second memory portion (e.g. assembly model) within the at least one memory device , wherein the second memory portion duplicatively stores a first subset of the first plurality of files and a second subset of the second plurality of files (col. 10, lines 43-53),

wherein each of the files of the first subset are referenced by at least one of the files of the second subset (inherently because as cited above, configuration objects are constructed with references to component in a model object, col. 10, lines 23-42), and

wherein the first and second subsets have information relating to a first project (e.g. model assembly project as shown in Fig. 5A).

As per claim 2, Haller et al. teach the at least a first portion of the first type of information relating to graphical entities relates to fundamental graphical information (such as model assembly).

As per claim 3, Haller et al. teach the first type of information relating to graphical entities concerns models (802, Fig. 8).

As per claim 4, Haller et al. further teach the first portion of the first type of information includes information selected from the group consisting of primitive information, vertices information, *face information*, native color information, and native pivot information (col. 9, lines 20-23).

As per claims 5 and 6, Haller et al. also teach each of the first plurality of files includes a numeric value, and each numeric value of each of the first plurality of files is different from each of the other numeric values of the others of the first plurality of files, and each of the first plurality of files includes a name (part name and values as shown in Fig. 9, each part has a unique name).

As per claim 7, Haller et al. further teach at least a first portion of the second type of information relating to graphical entities relates to secondary graphical characteristics (such as modifying shape, size and length of the object, col. 10, lines 14-22).

As per claim 8, Haller et al. also teach the second type of information relating to graphical entities concerns objects and object assemblies (as cited above, assembly model).

As per claim 9, Haller et al. teach the first portion of the second type of information includes information selected from the group consisting of special color information, *position information*, scale information, orientation information, pivot offset information, and animation path information (col. 8, lines 48-53).

As per claim 10, as cited above, Haller et al. further teach each of the second plurality of files includes at least one reference by which the respective file refers to model information within one of the first plurality of files (col. 10, lines 36-42).

As per claim 11, as cited above, Haller et al. teach each of the second plurality of files includes a numeric value, and each numeric value of each of the second plurality of files is different from each of the other numeric values of the others of the second plurality of files (as cited above, each part has a unique name).

As per claim 17, Haller et al. teach a new part can be created from the model objects 802 (Fig. 8) (first plurality of files) and configuration 808 (second plurality of files) as cited above, and can be stored for reuse (col. 10, lines 44-53), thus implies a third memory portion for storing a newly added part. Haller et al. further teach a communication means for sending and receiving graphical information to and from remote location (112, Fig. 1, external database col. 6, lines 11-24).

As per claim 18, Haller et al. teach method of managing information relating to graphical entities, the method comprising:

receiving selections of graphical entities to be incorporated into a project (*selecting objects 246 to be incorporated in a project 240, Fig. 2*);

retrieving higher-level information concerning the selected graphical entities from a first memory portion (*retrieving objects assembly 246 from graphics part library into assembly mode (project as shown in Fig. 2, such high-level objects 310-312 as shown in the hierarchical data structure in Fig. 3)*);

storing the higher-level information concerning the selected graphical entities in a second memory portion associated with the project, wherein the higher-level information stored in the second memory portion is duplicative of the higher-level information stored in the first memory portion (*as cited above with reference to claim 1*);

retrieving lower-level information concerning components of the selected graphical entities from the first memory portion (*retrieving parent node 301 in the hierarchical data structure in Fig. 3, see col. 6, line 50 to col. 7, line 6*); and

storing the lower-level information concerning the components of the selected graphical entities in the second memory portion, wherein the lower-level information stored in the second memory portion is duplicative of the lower-level information stored in the first memory portion (*as cited above with reference to claim 1*).

As per claim 19, as cited above, Haller et al. teach the components are models and the selected graphics entities include objects and objects assemblies.

As per claim 20, Haller et al. also teach each of the graphical entities and components having a filename and part number associated with it (col. 2, lines 4-12, and col. 7, lines 7-21), and each graphics entity and component has a unique name as cited above (col. 11, lines 23-37).

As per claim 21, Haller et al. teach receiving a command to create one of the components (e.g. command to create a new model as shown in Fig. 2), providing a template with fields to be completed (402, Fig. 4), receiving information to be completed (408-414, Fig. 4), and calculating the second identification number based on the received information (building a descriptor, col. 7, lines 41-55). Haller et al. teach storing the lower level information corresponding to the one component in the first memory portion (as cited above), wherein the lower level information includes the received information and an identification number (descriptor is built with the received entries, col. 7, lines 41-55).

Claim 22, which is similar in scope to claim 4, is thus rejected under the same rationale.

Claim 23, which is similar in scope to claim 21, is thus rejected under the same rationale.

As per claim 24, as cited above, Haller teach the received information includes information identifying at least of the components as corresponding to the one graphical entity (based on the created descriptor).

As per claim 26, as cited above with reference to Fig. 4, Haller et al. teach providing a template with fields to be completed, receiving the information to complete the fields, and recalculating identification number associated with the selected graphical entities based on the received information (i.e. regenerating descriptor based on the received information in the field, col. 7, lines 41-55), and storing the newly generated object as cited above. Haller et al. also teach a part can be replaced (col. 3, lines 21-28).

Claim 27, which is similar in scope to claims 12 and 13, is thus rejected under the same rationale.

Claim 28, which is similar in scope to claim 26, is thus rejected under the same rationale (see col. 3, lines 21-28 where the part can be *modified*).

As per claim 29, as cited above, Haller et al. teach the part newly generated can be stored in the part library for reuse (col. 4, lines 52-54, and col. 10, lines 43-53). Thus, it is implied that the newly generated part (which can be a modified part) is stored in both the current assembly model (second memory portion) and in the part library (first memory portion).

Claim 30, which is similar in scope to claim 17, is thus rejected under the same rationale.

As per claim 31, as cited above, with reference to claim 18, the storing of the plurality of graphical entities and plurality of components in the first portion of the memory device is discussed above. Haller et al. also teach generating a new part and store it in the graphics part library as also cited above (i.e. a new part including a second plurality of graphical entities and second plurality of components, and therefore, including a third and fourth information). Haller et al. further teach each part created and stored having an associated descriptors with tag that identifies the features (col. 9, lines 9-47). Haller et al. also teach determining the conflicts of the

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new part with the existing parts in the part library by comparing the attributes of a designed feature with attributes of model configuration (col. 11, lines 23-37), wherein the attributes contain a name and a number identifier (col. 7, lines 7-21).

As per claim 32, as cited above, Haller et al. teach determining the conflicts further including comparing respective names associated with the graphical entities and the components.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haller et al. (U.S. Patent No. 7,079,990).

As per claims 12 and 13, as cited above, Haller et al. teach generating a scene capable of being displayed on a graphical interface (as shown in Fig. 2), which comprises a plurality of parts and components (files) that relates to the second subset of the second plurality of files (based on the configuration 808 shown in Fig. 8). Although Haller et al. do not explicitly teach a third memory portion within the memory storage 110, it is well known in the art that when a user create a new project, memory are allocated as a working memory or workspace (such as *modeling space*, col. 2, lines 18-33) that the user can edit and save the new project. For at least the above reason, claims 12 and 13 would have been obvious.

As per claim 14, Haller et al. each of the third plurality of files is an instantiated version of its corresponding file from the second subset (col. 10, lines 36-42).

As per claim 15, Haller et al. teach instantiation of the third plurality of files involves replacing at least some of the information of the second type with alternate information (col. 3, lines 21-28).

As per claim 16, as cited above, Haller et al. teach the first memory portion is a graphics library (part library), the second memory is an EPGFL (portion of memory of storing parts imported from the part library with known configuration, 246, Fig. 2, col. 2, lines 18-47), the third memory portion is a scene memory (244, Fig. 2, please refer to claim 12), and the second and the third memory are comprised within a fourth memory portion that is a project file (240, Fig. 2, assembly model).

Allowable Subject Matter

7. Claim 25 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Reasons for Allowable Subject Matter

8. The cited prior art fails to teach the received information includes *all* the claimed information.

Response to Arguments

9. Applicant's arguments with respect to claims 1-32 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892 form.

Zuffante et al. (U.S. Patent No. 6,219,049) includes subject matter incorporated by reference by Haller et al. (the cited prior art above).

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hau H. Nguyen whose telephone number is: 571-272-7787. The examiner can normally be reached on MON-FRI from 8:30-5:30.

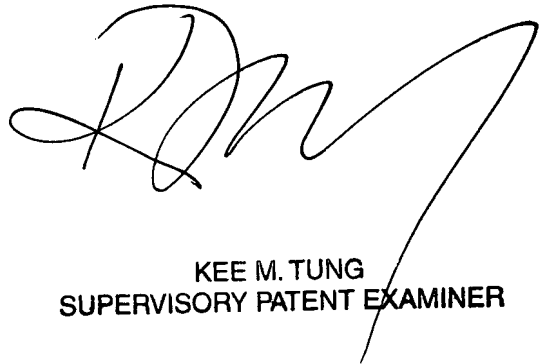
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung can be reached on (571) 272-7794.

The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

H. Nguyen

5/23/2007



KEE M. TUNG
SUPERVISORY PATENT EXAMINER